

CLAIMS

WHAT IS CLAIMED IS:

- 1 1. A method to manage interactions between applications and a data
2 store, comprising:
3 (a) concurrently extracting data from a data store into a first queue;
4 (b) concurrently servicing a plurality of applications with portions of
5 the data from the first queue;
6 (c) concurrently loading results data into a second queue, wherein the
7 plurality of applications concurrently produce the results data;
8 (d) concurrently populating the results data into a temporary table;
9 and
10 (e) merging the temporary table with a data store table of the data
11 store.

- 1 2. The method of claim 1 further comprising:
2 (f) establishing a plurality of first queues, wherein each first queue is
3 associated with a separate processing node that executes a subset of the
4 plurality of applications and each first queue includes the extracted data and
5 concurrently services the subset of the plurality of applications on the
6 separate processing node; and
7 (g) establishing a plurality of second queues, wherein each second
8 queue is associated with the separate processing node that executes the
9 subset of the plurality of applications and each second queue is currently
10 loaded with results data from the subset of the plurality of applications and
11 concurrently populates a second table, which is merged with the temporary
12 table before performing the merging.

- 1 3. The method of claim 1 wherein (b) further includes concurrently
2 servicing a number of the applications from a first processing node and
3 concurrently servicing a remainder of the applications from a second

4 processing node, wherein the first queue resides on the first processing
5 node.

1 4. The method of claim 1 wherein (c) further includes currently loading
2 the second queue with portions of the results data acquired from a number
3 of the applications processing on a first processing node and remaining
4 portions of the results data acquired from a remainder of the applications
5 processing on a second processing node, wherein the second queue
6 resides on the first processing node.

1 5. The method of claim 1 wherein (d) further includes currently
2 populating the temporary table with portions of the results data received
3 from the second queue associated with a number of the applications
4 processing on a first processing node and with remaining portions of the
5 results data received from a different second queue associated with a
6 remainder of the applications processing on a second processing node,
7 wherein the second queue resides on the first processing node and the
8 different second queue resides on the second processing node.

1 6. The method of claim 1 further comprising (f) concurrently initiating a
2 number of the applications on a first processing node and a remainder of the
3 applications on a second processing node.

1 7. The method of claim 6 processing further comprising concurrently
2 establishing the processing of (b)-(d) on the first processing node and the
3 second processing node.

1 8. A method to manage interactions between applications and a data
2 store, comprising:
3 receiving a query for a data store and an identifier for an application
4 that desires to process the results of the query and update the data store

5 with application data;
6 concurrently initiating multiple instances of an application associated
7 with the identifier on multiple processing nodes;
8 concurrently processing the query and housing the results in one or
9 more application queues residing on one or more of the processing nodes;
10 and
11 concurrently servicing each of the instances of the application from
12 the one or more application queues.

1 9. The method of claim 8 further comprising:
2 concurrently housing the application data in one or more load
3 queues residing on one or more of the processing nodes; and
4 concurrently populating one or more tables residing on one or more
5 of the processing nodes with the application data from the one or more load
6 queues.

1 10. The method of claim 9 further comprising merging the one or more
2 tables into the data store.

1 11. The method of claim 8 wherein the currently initiating further includes
2 determining a total number of the applications to initiate based on
3 configuration data.

1 12. The method of claim 11 wherein the currently initiating further
2 includes determining which of a number of the applications that are to be
3 initiated on which of a number of the processing nodes based on the
4 configuration data.

1 13. The method of claim 8 further comprising concurrently synchronizing
2 the application queues and the load queues on the multiple processing
3 nodes when at least some of the processing nodes lack one of the one or

4 more application queues or one of the one or more load queues.

1 14. The solution template system of claim 13 wherein the concurrently
2 synchronizing further includes establishing socket based communications
3 between the multiple processing nodes with a Transmission Control
4 Protocol/Internet Protocol (TCP/IP).

1 15. A data store application management system, comprising:
2 one or more application queues for servicing one or more
3 applications with results of a query to a data store;
4 one or more load queues for housing application data produced by
5 the one or more applications; and
6 a merge utility for merging the application data into a data store table.

1 16. The system of claim 15 further comprising a configuring utility for
2 determining a total number of the one or more applications.

1 17. The system of claim 15, wherein the configuring utility initiates a
2 number of the one or more applications, the one or more application
3 queues, and the one or more load queues on separate processing nodes.

1 18. The system of claim 15, wherein each of the one or more applications
2 concurrently processes the results and produces different portions of the
3 application data.

1 19. The system of claim 18, wherein each of the one or more application
2 queues and each of the one or more load queues concurrently update while
3 the one or more applications process.

1 20. A data store residing in a computer-readable medium, comprising:
2 one or more temporary tables that temporarily house application data
3 produced from concurrently processing applications in response to
4 concurrently provided query results extracted from the data store; and
5 an application data table that houses application data once the
6 applications have finished producing the application data, and wherein the
7 one or more temporary tables are merged into the application data table.

1 21. The data store of claim 20 wherein a merge utility merges the one or
2 more temporary tables to produce the application data table once each of
3 the plurality of applications have finished processing the query results.

1 22. The data store of claim 20 wherein one or more extract utilities
2 perform a query against the data store in order to acquire the query results,
3 which are concurrently consumed by the one or more applications to
4 produce the application data.

1 23. The data store of claim 22 wherein each of the one or more extract
2 utilities concurrently populate the query results to one or more application
3 queues.

1 24. The data store of claim 23 wherein each of one or more load utilities
2 concurrently receive portions of the application data from one or more load
3 queues and concurrently populate the portions to the one or more temporary
4 tables.

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6 25. The data store of claim 22 wherein the data store is a least one of
7 one or more databases and a data warehouse.